

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Release
IFU

Applicants: Billot et al.

Serial No.: 10/511,736

Case No.: MC058YP

Filed: 10/18/2004

For: EP4 RECEPTOR AGONIST, COMPOSITIONS AND METHODS THEREOF

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Communication

Sir:

Please see attached Request for Corrected Filing Receipt that was originally sent on August 22, 2005. Please note that on the cover page the USPTO Serial No., was incorrectly stated as "10/511, 738", the correct serial number is 10/511,736. I have indicated the correction on the attached copy of the Request for Corrected Filing Receipt.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on the date appearing below.

By C. D. Dora Date 9/1/05
MERCK & CO., INC.

Enclosures

Date: September 1, 2005

Respectfully submitted,

By [Signature]
Sylvia A. Ayler, Reg. No. 36,436
Attorney for Applicants
MERCK & CO., INC.
P.O. Box 2000
Rahway, New Jersey 07065-0907
(732) 594-4909



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

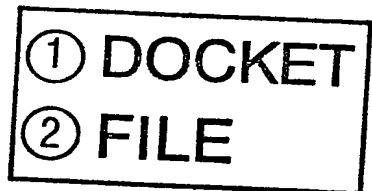
Applicants: Billot et al.

Serial No.: ~~10/511,738~~ 10/511,736 Case No.: MC058YP

Filed: 10/18/2004

For: EP4 RECEPTOR AGONIST, COMPOSITIONS AND METHODS THEREOF

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450



REQUEST FOR CORRECTED FILING RECEIPT

Sir:

Attached is a copy of the official filing receipt received from the Patent and Trademark Office in the above application for which issuance of a corrected filing receipt is respectfully requested.

There is an error with respect to the title of the patent application the correct title is "EP4 Receptor Agonist, Compositions and Methods Thereof" a copy of the filing receipt indicating change, a copy of the declaration and Power of Attorney and the transmittal letter is enclosed for your reference.

There is no fee believed due.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on the date appearing below.

By Christine Dona Date Aug 22, 2005
MERCK & CO., INC.
Enclosures

Date: August 22, 2005

Respectfully submitted,

By Sylvia A. Ayler
Sylvia A. Ayler, Reg. No. 36,436
Attorney for Applicants
MERCK & CO., INC.
P.O. Box 2000
Rahway, New Jersey 07065-0907
(732) 594-4909

MC058Yf



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/511,736	10/18/2004	1614	1394	MC058YP		26	2

DOCKETED

JUL 12 2005

KATHY KLUTKOWSKI

CONFIRMATION NO. 2550

FILING RECEIPT



OC000000016401406

210
MERCK AND CO., INC
P O BOX 2000
RAHWAY, NJ 07065-0907

Date Mailed: 07/05/2005

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Xavier Billot, Montreal, CANADA;
Robert N. Young, Senneville, CA;
Yongxin Han, Kirkland, CA;

Power of Attorney: The patent practitioners associated with Customer Number 210.

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/CA03/00838 06/02/2003
which claims benefit of 60/386,499 06/06/2002
and claims benefit of 60/460,134 04/03/2003 *
(*Data provided by applicant is not consistent with PTO records.)

Foreign Applications

Projected Publication Date: 10/06/2005

Non-Publication Request: No

Early Publication Request: No

Title

EP4, Receptor Agonist, Compositions and Methods Thereof
~~1,5-disubstituted pyrrolid-2-one derivatives for use as ep4 receptor agonists in the treatment of eye diseases such as glaucoma~~

Preliminary Class

514

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

LICENSE FOR FOREIGN FILING UNDER Title 35, United States Code, Section 184 Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls.

BEST AVAILABLE COPY

Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Office of Export Administration, Department of Commerce (15 CFR 370.10 (j)); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

BEST AVAILABLE COPY

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE**TRANSMITTAL LETTER TO THE UNITED STATES
DESIGNATED/ELECTED OFFICE (DO/EO/US)
CONCERNING A FILING UNDER 35 U.S.C. 371**

ATTORNEY'S DOCKET NUMBER

MC0587P

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)

To be Assigned

PRIORITY CLAIMED

June 6, 2002

INTERNATIONAL APPLICATION NO.
PCT/CA03/00838INTERNATIONAL FILING DATE
June 2, 2003

TITLE OF INVENTION

EP4 RECEPTOR AGONIST, COMPOSITIONS AND METHODS THEREOF

APPLICANT(S) FOR DO/EO/US

Xavier Billot, Robert N. Young and Yongxin Han

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☐ This is an express request to begin national examination procedures [35 U.S.C. 371(f)]. The submission must include items (5), (6), (9) and (19) indicated below.
4. ☒ The US has been elected (PCT Article 31).
5. ☒ A copy of the International Application as filed [35 U.S.C. 371(c)(2)]
 - a. ☐ is attached hereto (required only if not communicated by the International Bureau).
 - b. ☒ has been communicated by the International Bureau.
 - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ An English language translation of the International Application as filed [35 U.S.C. 371(c)(2)].
7. ☒ Amendments to the claims of the International Application under PCT Article 19 [35 U.S.C. 371(c)(3)].
 - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
 - b. ☐ have been communicated by the International Bureau.
 - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
 - d. ☒ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 [35 U.S.C. 371(c)(3)].
9. ☒ An oath or declaration of the inventor(s) [35 U.S.C. 371(c)(4)].
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 [35 U.S.C. 371(c)(5)].

Items 11 to 18 below concern other document(s) or information included:

11. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☐ A **FIRST** preliminary amendment.
14. ☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
15. ☐ A substitute specification.
16. ☐ A power of attorney and/or change of address letter.
17. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825.
18. ☐ Other items or information:

EXPRESS MAIL CERTIFICATEDATE OF DEPOSIT 10-18-04EXPRESS MAIL NO. EL 929 589 829 USI HEREBY CERTIFY THAT THIS CORRESPONDENCE IS
BEING DEPOSITED WITH THE UNITED STATES POSTAL
SERVICE AS EXPRESS MAIL "POST OFFICE TO ADDRESSEE"
ON THE ABOVE DATE IN AN ENVELOPE ADDRESSED TOCOMMISSIONER FOR PATENTS, P.O. BOX 1450,
ALEXANDRIA, VIRGINIA 22313-1450MAILED BY Patent & Trademark (DO/EO/US) (PCT Folder), Merck & Co., Inc., 9/29/2004DATE 10-18-04

U.S. APPLICATION NO. (If known, see 37 CFR 1.5) To be Assigned		INTERNATIONAL APPLICATION NO. PCT/CA03/00838		ATTORNEY'S DOCKET NUMBER MC058YP	
---	--	---	--	-------------------------------------	--

19. <input checked="" type="checkbox"/> The following fees are submitted:				CALCULATIONS	PTO USE ONLY
BASIC NATIONAL FEE [37 CFR 1.492(a)(1)-(5)]: Neither international preliminary examination fee (37 CFR 1.482) nor international search fee [37 CFR 1.445(a)(2)] paid to USPTO and International Search Report not prepared by the EPO or JPO..... \$1,110.00 International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO..... \$950.00 International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee [37 CFR 1.445(a)(2)] paid to USPTO \$790.00 International preliminary examination fee paid to USPTO (37 CFR 1.482) but all claims did not satisfy provisions of PCT Article 33(1)-(4)..... \$750.00 International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(1)-(4)..... \$100.00 <div style="text-align: right;">ENTER APPROPRIATE BASIC FEE AMOUNT =</div>					
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date [37 CFR 1.492(e)].					
Claims	Number Filed	Number Extra	Rate		
Total Claims	19 - 20 =	0	X \$18.00	\$0.00	
Independent Claims	2 - 3 =	0	X \$88.00	\$0.00	
Multiple dependent claim(s) (if applicable)			+ \$300.00	\$0.00	
TOTAL OF ABOVE CALCULATIONS =				\$950.00	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.					
SUBTOTAL =				\$950.00	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).					
TOTAL NATIONAL FEE =				\$950.00	
Fee for recording the enclosed assignment [37 CFR 1.21(h)]. The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property.					
TOTAL FEES ENCLOSED =				\$950.00	
				Amount to be refunded	
				charged	

a. ☐ A check in the amount of \$ _____ to cover the above fees is enclosed.

b. ☒ Please charge my Deposit Account No. 13-2755 in the amount of \$950.00 to cover the above fees. A duplicate copy of this sheet is enclosed.

c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to the Deposit Account No. 13-2755. A duplicate copy of this sheet is enclosed.

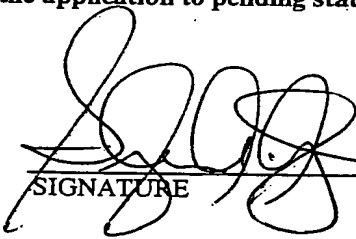
NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive [37 CFR 1.137(a) or (b)] must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:
Customer No. 000210

MERCK & CO., INC.
 Patent Department, RY60-30
 P.O. Box 2000
 126 East Lincoln Avenue
 Rahway, New Jersey 07065-0970

DATE: October 18, 2004

PHONE #: (732) 594-4909


 SIGNATURE
 Sylvia A. Ayler
 NAME
36,436
 REGISTRATION NUMBER

**DECLARATION AND
POWER OF ATTORNEY
FOR UTILITY OR DESIGN
PATENT APPLICATION
(37 CFR 1.63)**

☒ Declaration Submitted with Initial Filing OR ☐ Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)

Attorney Docket Number	MC058Y
First Named Inventor	Xavier Billot, et al.
COMPLETE IF KNOWN	
Application Number	
Filing Date	
Group Art Unit	
Examiner Name	

As a below named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

EP4 RECEPTOR AGONIST, COMPOSITIONS AND METHODS THEREOF

the specification of which *(Title of the Invention)*☒ bears the Attorney Docket Number and Title of the Invention noted above

OR

☐ is attached hereto

OR

☐ was filed on (MM/DD/YYYY) [] as United States Application Number or PCT International

Application Number [] and was amended on (MM/DD/YYYY) [] (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose to the Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f) or 365(b) of any foreign application(s) for patent or inventor's certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate(s), or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Attorney Docket Number	Priority Claimed?	
				YES	NO
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below.

Application Number(s)	Filing Date (MM/DD/YYYY)	Attorney Docket Number
60/386,499	06/06/2002	MC058PV
60/460,134	04/03/2003	MC082PV

DECLARATION AND POWER OF ATTORNEY for Utility or Design Patent Application

I hereby claim the benefit under 35 U.S.C 120 of any United States application(s), or 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information known to me to be material to patentability as defined in 37 CFR 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

U.S. Parent Application or PCT Parent Application Number	Parent Filing Date (MM/DD/YYYY)	Parent Patent Number (if applicable)

☐ Additional U.S. or PCT international application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

As a named inventor, I hereby appoint, respectively and individually, as my attorney(s) or agent(s) with full power of substitution and revocation, the following registered practitioner(s) to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith:

☐ Customer Number
OR
☒ Registered practitioner(s) name/registration number listed below

Place Customer Number
Bar Code Label here

Name	Registration Number	Name	Registration Number
Sylvia A. Ayler	36,436		
Valerie J. Camara	35,090		

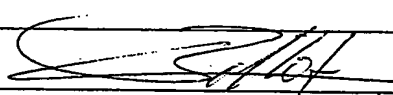
Direct all correspondence to: ☒ Customer Number or Bar Code Label

000210

Name	Sylvia A. Ayler				
Address	Merck & Co., Inc. - Patent Department				
Address	P.O. Box 2000, RY60-30				
City	Rahway	State	NJ	ZIP	07065-0907
Country	USA	Telephone	(732)594-4909	Fax	(732)594-4720

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

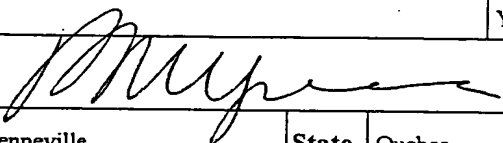
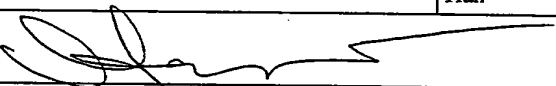
Name of Sole or First Inventor: ☐ A petition has been filed for this unsigned inventor

Given Name (first and middle [if any])		Family Name or Surname			
Xavier		Billot			
Inventor's Signature				Date	May 15 th 2003
Residence: City	Montreal	State	Quebec	Country	Canada
				Citizenship	France
Post Office Address	Merck & Co., Inc., P.O. Box 2000				
City	Rahway	State	NJ	ZIP	07065-0907

☒ Additional inventors are being named on the _____ supplemental Additional Inventors(s) sheet(s) PTO/SB/02A attached hereto.

DECLARATION AND POWER OF ATTORNEY

ADDITIONAL INVENTOR(S)
Supplemental Sheet

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor						
Given Name (first and middle [if any])				Family Name or Surname				
Robert N.				Young				
Inventor's Signature					Date		May 20/03	
Residence: City		Senneville	State	Quebec	Country	CA	Citizenship	CA
Post Office Address		Merck & Co., Inc., P.O. Box 2000						
City		Rahway	State	NJ	ZIP	07065-0907		
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor						
Given Name (first and middle [if any])				Family Name or Surname				
Yongxin				Han				
Inventor's Signature					Date		May 20/03	
Residence: City		Kirkland	State	Quebec	Country	CA	Citizenship	CA
Post Office Address		Merck & Co., Inc., P.O. Box 2000						
City		Rahway	State	NJ	ZIP	07065-0907		
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor						
Given Name (first and middle [if any])				Family Name or Surname				
Inventor's Signature					Date			
Residence: City			State		Country		Citizenship	
Post Office Address		Merck & Co., Inc., P.O. Box 2000						
City		Rahway	State	NJ	ZIP	07065-0907		
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor						
Given Name (first and middle [if any])				Family Name or Surname				
Inventor's Signature					Date			
Residence: City			State		Country		Citizenship	
Post Office Address		Merck & Co., Inc., P.O. Box 2000						
City		Rahway	State	NJ	ZIP	07065-0907		
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor						
Given Name (first and middle [if any])				Family Name or Surname				
Inventor's Signature					Date			
Residence: City			State		Country		Citizenship	
Post Office Address		Merck & Co., Inc., P.O. Box 2000						
City		Rahway	State	NJ	ZIP	07065-0907		